Introduction

Travel to and from the camp on Mt. Parnassós turned out to be surprisingly easy. Having moved the majority of ironmongery, in the form of karabiners/hangers etc., through security by placing it in hand luggage, we expected a certain amount of aggravation at the metal detector/x-ray section. However, the sheer amount of gear the staff were having to unpack combined with the queue forming behind us convinced them that we were not hell bent on hijack despite the numerous references to "hangers".

Upon arriving in Athens and hiring a couple of cars we headed for an official campsite on the northwest fringes of Athens at Daphne. After an excruciatingly hot night dreaming of dewy watermelon we moved on up the coast to another campsite near Delphi from which we could reconnoitre the slopes of Mt. Parnassós for a suitable camp for the weeks to follow.

Consensus was reached on a small alpine glade at the edge of the tree line at about 1700m. What became our base camp for the month lay on the western slope of the mountain looking across the valley to Mt. Ghiona with the rest of the Sterea Ellada stretching away to the northwest. This glade was about 10 minutes walk from Kelaria, one of the ski lodges dotting the mountain, with the only metalled road running north-south in-between.

Despite being the main access for the ski-lifts, the roads were in distinct disrepair on arrival with bomb crater size potholes. There was never any doubt of our road vehicles being up to it, however, and later in the month a team appeared to put a quick skim over the worst bits in preparation for the ski season.

Camp consisted of two 3-man tents and food throughout the 4 weeks was collected from Delphi (45mins by car) or if possible from supermarkets at Amfissa. Itea, although supplying all the necessary shops, was still very much a siesta town with everything shut up by early afternoon. Eptalofos, much closer than all the others, had limited facilities and seemed brimming with tavernas but an expedition cannot live by the grape alone!!

Access to a reliable source of drinking water had been a serious concern before leaving the UK as there is very little surface water in these mountainous areas. Happily it turned out to be a minor problem as the numerous wells and faucetted springs were easy to find with the aid of a good map and a chat with the local shepherds. The maps we used consisted of centre pages removed from the Greek "Korfes" climbing magazine. These were easily obtainable via Stanfords in London and were just about the only 1:50,000 maps available, the Greek army being sensitive about such information.

The only people present on the mountain at this time of year (known as the "windy" season) were the shepherds, one of which we came particularly well acquainted with on his numerous visits to camp. Through a combination of phrase book, dictionary and sign language we were sent in the direction of a few entrances known to these men, P10 being the most impressive.

P20, investigated the day before we left, was found to have a small cairn just inside the lobsterpot entrance enabling the local man to climb in and retrieve any trapped goats. Virtually all of the caves which we investigated contained remains of some description and, in response, the shepherds seem to have plugged any obvious aperture with trash especially when close to the road. As far as the ski industry is concerned though it is "out of sight, out of mind" as any convenient doline is gradually filled with a combination of bottles, plastic and rusting trash all of which will be conveniently hidden by the winter snows.

Away from immediate road access the terrain is much wilder with the western slopes covered in dense alpine forest and the rest bare, cratered limestone karst. Pinpointing entrances would have been relatively easy above 1700m as there is no cover and a reasonable view of local landmarks but, as a concession to the techno-era, we used a hand-held GPS system which, although not desperately accurate, was sufficient to guide us to within sight of a known entrance. The same device was also used for forest-covered caves by marking a nearby glade although it became vital for a returning group to have prior knowledge of the cave appearance.

Most of the features investigated on Mt. Parnassós were tight and rift driven. This seemed to ease off as the local faulting was followed eastwards around the southern slopes of the mountain. On reaching P20 the passage had reached typical UK walking passage dimensions and prospects for other, similar entrances in the vicinity of this gorge are good.

In the forested western slopes there are large regions of back-to-back do lines, 60m diameter being typical, making prospecting heavy going. Progress was dependent upon reaching depth fast enough to clear the bottom of the adjacent dolines. P05 is the classic example having three entrances two of which are in a neighbouring depression. Even if the entrance was heading downwards fast enough the modest dimensions and presence of copious amounts of snowy drip formation tended to choke the passage. Only P03 reached any depth in this region and eventually it too became terminally narrow, even for our resident pipe-cleaner, Mark Middleton.

All caves investigated were lacking in flowing water although most were damp

to a degree. Only those caves in the eastern gorge, notably P20, and the very bottom of P03, in the forest region, contained notable quantities of liquid and in these cases it seems to be static at this time of year.

Despite this, interest is high in those larger passages spotted just prior to our departure and the areas draining towards the resurgences near Itea in the south and Lilea in the north have yet to be investigated. Expedition preparations for '97 are presently underway.

Geology

Approximately 65% of the Greek landscape is composed of limestone's ranging from the Jurassic to the Quaternary. Cave formation took place in the Tertiary and Quaternary periods and has led to karst regions rich in speleological interest (7000 caves registered by 1980). Often of small dimension, the great number of entrances has meant that many have archaeological, historical or mythical connections such as the Corycian Cave on the slopes of Mt. Parnassós, a gift to the nymph Corycia from Apollo.

Mt. Parnassós rises out of the northern shores of the Gulf of Korinthos to a height of 2457m. The mountain supports the local community in the form of tourism (the temple of Apollo at Delphi), agriculture (sheep, goats & olives) as well as a thriving local Bauxite mining industry.

Both Mt. Parnassós and the neighbouring Mt. Ghióna contain numerous surface pockets of this lucrative aluminium ore. Most is channelled down to a distribution site in nearby Itea from where it is shipped out. Although this strip mining is one of the major causes of deforestation in the area, barring forest fires and grazing damage, the individual operations are small and large tracts of untouched alpine forest still remain below 1800m.

Mt. Parnassós consists of a number of peaks, rather than a distinct summit, the highest of which, Liákoura (???????), reaches 2457m. The western reaches of the mountain have seen rapid encroachment of metalled roads tourism related development as a consequence of the Ski and Bauxite activities but the eastern portion still retains the remoteness once associated with this historical area.

The limestone landscape is heavily folded and significant portions of the mountain consist of disappointing fields of frost shattered rock. Despite this, there are extended regions of dolines, possibly due to the heavy faulting in the area, and prominent sections of karrenkarst. These were primarily seen in the eastern regions above 1700m and in the south western forest below 1700m. The main karst springs which feed the Velítsa ravine on the north-eastern side of the mountain were not investigated but a number of perched wells were

encountered at the eastern extent the expedition area. This seems to suggest that the underlying water table consists of a series of perched basins which would tally with the heavy folding observed in the immediate area.

Promising regions for investigation in the future lie to the west of Kalívia (???_???). It is felt, however, that a more comprehensive knowledge of the complex faulting and hydrology is required if investigators are to locate possible sources for the Lilea (?????) resurgences which draw from this area. Resurgences on the coast west of Itea indicate a large quantity of water flowing year round under the southern slopes of Mt. Ghióna towards the Gulf. A brief prospecting trip has suggested that further investigation is warranted and this will be followed up on a later occasion.

Equipment Report

STEVE GILBERT & DAVE BETTERIDGE

The quantity of equipment available for the expedition was limited by the fact that all six of us were travelling to Greece by air. Flying with British Airways meant that we could each take 23kg of main luggage and 5kg of hand luggage. It was suggested that in reality, we needn't worry about these limits when flying on a scheduled flight because they are often quite tolerant with excess baggage. However, to avoid the risk of incurring the hefty charges for excess weight, we decided to pack conservatively and keep within the airline's limits. Several months before departure, a list was made containing every conceivable piece of equipment we might need whilst in Greece. The majority of these items were weighed as accurately as possible given the set of kitchen and bathrooms scales available. From this information, many low priority items were struck of the list, an inventory made and a sensible distribution of the baggage formulated. The general theme was that of communal gear spread across the space remaining in peoples rucksacks with the remainder of the gear to be placed in one additional rucksack (thanks Paul).

As it turned out, none of the rucksacks were weighed. The hand luggage, however, caused the customs officials great amusement. We'd packed it full of dense items including flat-pack batteries, metalwork and bolting equipment. This was done to keep the main luggage below the limit, whilst keeping the hand luggage as small as possible. (Small considering its weight anyway. Slightly over 5kg by this stage!)

SHELTER

To accommodate the 6 of us, we could have taken three 2-man tents and lived in comfort. Unfortunately, given the severe weight limits, we opted for a couple of

3-man tents. As you could guess, this became quite grim after a month! Both tents had two quite substantial porch-ways, which just about housed all the equipment. A tent purely for equipment would have been helpful in keeping gear organised as would a tent solely for the storage of food. As it was, after a particularly hard days caving or prospecting, things were sometimes left lying around.

COVERING

A number of large, durable sheets of polythene from Cromwell Polythene proved very useful. A sheet was used to emulate a tarpaulin cover between the two tents. This provided shelter in both the evening, whilst cooking and eating, and during the day from the scorching sun.

Further sheets were used to protect the food and any remaining equipment which didn't fit in the porch-ways, from both the goats and the elements.

BIVOUAC

In addition to the two tents we also took a Gore-Tex bivvi bag each. These were mainly used on the two-man reccies to the higher ground and traveling down the mountain to the train station. On occasion, I made use of one just to escape the squeeze in the tent! (Either Dave's knees in my back or Mike's feet in my face! - I was a saint and could do no wrong - obviously!).

WATER

Many of the maps had fresh water springs marked. In the case of these being unclean or dry, we purchased two Katydyn mini-filters. These would were useful for reducing the weight recce groups had to carry, particularly if they intended to be away from a clean water source for more than a day. Fortunately, only a short drive away, there was a reliable source of clean water. However, during the periods we were without transport, we switched to a well (used by goat herders), located about half a mile away. We collected water from here once every couple of days in collapsible water containers. Due to the obvious threat of Giardia through the wells association with goats, we either boiled it in the process of cooking or purified it for water bottles using the aforementioned filters. Unfortunately, the screw cap sealing the vessel containing the ceramic filter soon fractured on both devices. This occurred after passing only a relatively small amount of water. This weakness was the consequence of an obvious design fault and we were reduced to using water purification tablets for the remaining period until transport was again available.

GPS

We bought a Garman 45XL hand held GPS shortly before the beginning of the expedition. The lack of detail on the Greek maps meant that it became an

invaluable tool for recording cave locations. Without this information, relocating caves would be almost impossible. In future expeditions, at least two GPS should be taken.

RIGGING

Like everything else, the caving gear was also limited. We took the following;

220 metres of 10.5mm rope.

An assortment of hangers. (Rings, bends, twists and even a few clowns. A total of about 40)

A large number of slings.

Approximately 20 screw-gate Karabinas

2 climbing hexentrics.

The hexs' turned out to be very useful in rigging entrance shafts quickly. We also took three bolting kits and 100 spits (of which about 30 were used). As it turned out, we took almost exactly the right length of rope but far too much metal work. For ease and speed most of the pitches were rigged using slings, crabs and the hexs.

SURVEYING EQUIPMENT

We were equipped with two sets of Suunto compasses and clino's. Opening and cleaning before the expedition removed a significant amount of dirt, but one of the sets still proved quite difficult to read. Unfortunately, the budget didn't permit investment in another set. On future expeditions, the quality of the surveying equipment will be given a higher priority.

STOVES

All the cooking was done on two MSR petrol stoves and a single burner gaz stove. Petrol was very readily available with petrol stations on almost every road. The disposable 206 gaz cylinders were also incredibly cheap (about 50 pence each.)

CAMP LIGHTING

For the first couple of weeks the only lighting in the camp was that provided by people's personal head torches. After a while, this was found uncomfortable and expensive on batteries. With the gas canisters being so cheap we decided to invest in a gas lamp (for about $\pounds 15$).

PERSONAL GEAR

Each persons gear was limited by size and weight. In addition to a sleeping bag, bed roll, clothes and caving gear, an additional kilo was allowed for personal things such as books and personal stereos etc. Several members were not totally

prepared for the high altitude cold, taking only thin sleeping bags and a few warm items of clothing.

CAVING LIGHTS

Before departing for Greece, our attempts at locating a source of carbide resulted in dead-ends. We hoped that when we were out there, we might be more successful - but alas, we found none. In case of this (and possible difficulty in obtaining flat-pack batteries) we bought 30 Duracell's whilst in Britain. This meant that all caving was done on electrics. (Either the Petzl duo, zoom or laser. Or in some cases, a number of these simultaneously, prompting a series of rather silly Dalek impressions!). (Not silly at all!! :ED)

A number of AA to Flat-Pack 4.5V converters were constructed in case the flatpacks ran dry. Also, a couple of small solar cells for re-charging AA's were used to very limited effect. (Taking about 12 hours to half charge one set of AA cells.) It might be worth investing in a larger set of solar cells in future years. In any case, rotating them into the direction of the sun provides hours of amusement for the person(s) remaining in camp! (or at least relieved the boredom!)